

AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A method for creating a delay profile, making method comprising[.,.]:

receiving a CDMA radio signal under a multipath condition;

buffering received data corresponding to a first path in a first bank of a storage memory during a first time interval;

buffering received data corresponding to a second path in a second bank of the storage memory during a second time interval;

simultaneous to buffering the received data corresponding to the second path,
reading the received data corresponding to the first path from the first bank and supplying
the received data corresponding to the first path to a correlation detector;

buffering the received signal in a storage memory and thereafter performing a correlation detection of a symbol sequence using a correlation detector, said symbol sequence contained being included in said received signal and comprising a repetition of a unit pattern of +1 and -1;

performing an in-phase addition using the obtained a correlation obtained by the correlation detection, where in which said unit pattern is a processing unit; and

performing a power calculation of the received signal utilizing a result of the in-phase addition value and making creating a delay profile[.,.]

~~wherein said storage memory adopts a multibank configuration comprising a first bank and a second bank; and wherein received data corresponding to the first path is stored in the first bank and the received data corresponding to the second path is next stored in the second bank, while, in parallel, said received data corresponding to the first path is read from the first bank and supplied to said correlation detector where correlation detection processing is performed.~~

2. (Currently Amended) The ~~delay profile making~~ method according to claim 1, wherein a capacity of said storage memory is ~~configured with an entire memory capacity thereof~~ smaller than a capacity of data corresponding to a search period ~~in of~~ the delay profile making; and

wherein, to accommodate the received data corresponding to the second path in the second bank of said storage memory ~~with certainty~~, regardless of a spatial relationship between the first path and the second path in said search period ~~in delay profile making~~, a storage timing ~~to for~~ the first bank and the second bank of said storage memory is changed adaptively changed based on information acquired in advance regarding the a timing of the received CDMA radio signal.

3. (Currently Amended) The ~~delay profile making~~ method according to claim 1, wherein the symbol sequence that is contained in a included in the received signal and that comprises a repetition of a unit pattern of +1 and -1 is a symbol sequence of a pilot signal of a secondary common pilot channel of a common pilot channel, said common

pilot channel being a physical layer in a W-CDMA communication system.

4. (Currently Amended) A delay profile making An apparatus for creating a delay profile, comprising:

a storage memory that buffers a CDMA radio signal received under a multipath condition by buffering received data corresponding to a first path in a first bank of the storage memory during a first time interval and buffering received data corresponding to a second path in a second bank of the storage memory during a second time interval;

a correlation detector that performs a correlation detection of a symbol sequence contained included in said received CDMA radio signal and comprising a repetition of a unit pattern of +1 and -1;

an in-phase adder that performs an in-phase addition using the obtained a correlation obtained by the correlation detection and adopting said unit pattern as a processing unit;

a power calculator that performs a power calculation of the received signal utilizing a result of the in-phase addition value and makes creates a delay profile, wherein said storage memory adopts a multibank configuration comprising a first bank and a second bank; and wherein received data corresponding to the first path is stored in the first bank and the received data corresponding to the second path is next stored in the second bank, while, in parallel, said received data corresponding to the first path is read from the first bank and supplied to said correlation detector where correlation detection processing is performed the received data corresponding to the first path is read from the first bank

and supplied to the correlation detector simultaneous to the received data corresponding to the second path being buffered in the second bank.

5. (Currently Amended) The ~~delay profile making~~ apparatus according to claim 4, wherein a capacity of said storage memory is ~~configured with an entire memory capacity thereof~~ smaller than a capacity of data corresponding to a search period ~~in of the~~ delay profile making; and

wherein, to accommodate the received data corresponding to the second path in the second bank of said storage memory ~~with certainty~~, regardless of a spatial relationship between the first path and the second path in ~~said a~~ search period ~~in delay profile making~~, a storage timing ~~to for~~ the first bank and the second bank of said storage memory is changed adaptively changed based on information acquired in advance regarding the a timing of the received CDMA radio signal.

6. (Currently Amended) The ~~delay profile making~~ apparatus according to claim 4, wherein the symbol sequence ~~that is contained in a~~ included in the received CDMA radio signal and ~~that comprises a repetition of a unit pattern of +1 and -1 is the (a?)~~ comprises a symbol sequence of a pilot signal of a secondary common pilot channel of a common pilot channel, said common pilot channel being a physical layer in ~~a~~ W-CDMA communication system.

7. (Currently Amended) A receiver that supports a W-CDMA communication system standard, comprising the ~~delay profile-making apparatus of creating a delay profile of claim 4.~~

8. (New) An apparatus for creating a delay profile, comprising:
a storage memory that buffers a CDMA radio signal received under a multipath condition by buffering received data corresponding to a first path in a first bank of the storage memory during a first time interval, and buffering received data corresponding to a second path in a second bank of the storage memory during a second time interval; and
a correlation detector that performs a correlation detection of a symbol sequence included in the received radio signal,
wherein the received data corresponding to the first path is read from the first bank and supplied to the correlation detector simultaneous to the received data corresponding to the second path being buffered in the second bank.

9. (New) The apparatus according to claim 8, wherein a capacity of said storage memory is smaller than a capacity of data corresponding to a search period of a delay profile created by the apparatus; and
wherein, to accommodate the received data corresponding to the second path in the second bank of said storage memory, regardless of a spatial relationship between the first path and the second path in a search period, a storage timing for the first bank and

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the second bank of said storage memory is adaptively changed based on information acquired in advance regarding a timing of the received CDMA radio signal.

10. (New) The apparatus according to claim 8, wherein the symbol sequence included in the received CDMA radio signal comprises a symbol sequence of a pilot signal of a secondary common pilot channel of a common pilot channel, said common pilot channel being a physical layer in a W-CDMA communication system.

11. (New) The method according to claim 1, further comprising buffering received data corresponding to a third path in the second bank of the storage memory during a third time interval, and

simultaneous to buffering the received data corresponding to the third path, reading the received data corresponding to the second path from the second bank and supplying the received data corresponding to the second path to the correlation detector.

12. (New) The method according to claim 1, further comprising buffering received data corresponding to a third path in a third bank of the storage memory during a third time interval, and

simultaneous to buffering the received data corresponding to the third path, reading the received data corresponding to the second path from the second bank and supplying the received data corresponding to the second path to the correlation detector.

13. (New) The apparatus according to claim 4, wherein the storage memory buffers received data corresponding to a third path in the second bank of the storage memory during a third time interval, the received data corresponding to the second path being read from the second bank and supplied to the correlation detector simultaneous to the received data corresponding to the third path being buffered in the second bank.

14. (New) The apparatus according to claim 4, wherein the storage memory buffers received data corresponding to a third path in a third bank of the storage memory during a third time interval, the received data corresponding to the second path being read from the second bank and supplied to the correlation detector simultaneous to the received data corresponding to the third path being buffered in the third bank.

15. (New) The apparatus according to claim 8, wherein the storage memory buffers received data corresponding to a third path in the second bank of the storage memory during a third time interval, and

the received data corresponding to the second path is read from the second bank and supplied to the correlation detector simultaneous to the received data corresponding to the third path being buffered in the second bank.

16. (New) The apparatus according to claim 8, wherein the storage memory buffers received data corresponding to a third path in a third bank of the storage memory during a third time interval, the received data corresponding to the second path being

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read from the second bank and supplied to the correlation detector simultaneous to the received data corresponding to the third path being buffered in the third bank.